

Improving motor skills of children in secondary school by using means specific to football game

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Abstract

Football, by tradition is a popular sport, a mass sport, both for those who practise it and for the audience. The game of football becomes the only sport that can be practised by everybody. Its simplicity is expressed by a regulation set which includes few basic rules, logical rules and relatively easy to understand. Football is a game that develops basic motor skills: speed, strength, stamina, specific skills. Use of means specific to the football game in physical education classes at the secondary level aims to improve motor skills and streamline the educational process. The means specific to the football game that are used are simple, clear, suitable for both girls and boys, in order to achieve outstanding results in physical education classes.

Key words: motor skills, football game, strength, speed, stamina, skill.

Rezumat

Fotbalul, prin tradiție este un sport popular, de masă, atât la nivelul practicanților cât și la nivelul spectatorilor. Jocul de fotbal devine singurul sport ce poate fi practicat de toți. Simplitatea lui se exprimă printr-un regulament care cuprinde puține reguli fundamentale, reguli logice și relativ ușor de înțeles. Fotbalul este un joc care dezvoltă deprinderile motrice de bază: viteza, forța, rezistența, îndemânarea specifică. Folosirea mijloacelor specifice jocului de fotbal în orele de educație fizică de nivel gimnazial, are ca scop îmbunătățirea acestor calități motrice precum și eficientizarea procesului instructiv-educativ. Mijloacele specifice jocului de fotbal folosite sunt simple, clare, adaptate atât pentru fete cât și pentru băieți cu scopul de a se obține rezultate remarcabile în cadrul orelor de educație fizică școlară.

Cuvinte cheie: calități motrice, jocul de fotbal, forță, viteză, rezistență, îndemânare.

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Introduction

Football, with its full gear, falls into the category of social phenomena, which is a necessity with and by visible effects, effects that require special attention on both sides: teacher - students. Traditionally football is a popular sport, a mass sport, both for those who practise it and for the audience; of the sports that can be included in this category of "popular" - basketball, volleyball, handball, rugby, hockey etc., football is the most popular globally.(1)

On the other hand, the simplicity of the game is also expressed by a regulation which includes few basic rules, rules that are actually quite logical and relatively easy to understand.

Football belongs to both the biological and the cultural, to the personal experience of the game as much as to the history that recounts its origins, deeds and gestures.

No other sport has such a large practice area and it wouldn't have, given its particularities. Each one of us must be convinced of its influence on the physical and psychological and of its educational value when it is practised in an organized framework and run by professionals with a thorough preparation. (2)

The purpose

The object of this research is the process of training in "physical education" of secondary school pupils based on the use of movement games specific to the football game in order to develop coordinative capacity and physical training. It was assumed that the use of an increased share of movement games specific to the football game during physical education lessons in secondary school will help to optimize the training of students, substantially encouraging:

- Developing coordinative skills;
- Increasing the level of movement training;
- Improving quality indices to appropriate the subject "physical education";
- Growing interest in the physical education in schools.(3)

Assuming that the physical development level (the biological peculiarities) and the motor ability level (the level of motor abilities and motor skills - in volume and performance) have a wide enough distribution within the same class, the following assumption will be made:

"Treatment of motor and physical skills development using modern methods and specific means to the football game can lead to an increase in their index event and hence in the efficiency of the instructive - educational process."

The purpose of the research is to optimize the training process for the "physical education" subject in secondary school students, developing coordination abilities by applying tools and exercises specific to football in physical education lessons.

Method

Analyzing the results obtained from the physical training of students enrolled in the ascertaining experiment it is noted that for all six events, the performance of the subjects is under the guiding scales proposed by the National Evaluation System. Very poor results are recorded for resistance running and long jump on the spot and the results achieved are superior to the model ones only if the trunk is raised in the case of boys. This highlights the fact that the physical training in the school program is conducted at low levels. The classes of the school program are not sufficient to ensure the appropriate level of this training which is, moreover, a measure of success in physical education at all stages during school age.

Taking into account the views of experts, analyzing the planning documents and the results recorded in the ascertaining experiment, we consider that an intervention is required in the training process of students through a conscious and participatory organization of their work independently, actively using other forms of organizing physical education in schools.

Testing methodology

As a control group a class of students that were practicing physical education according to the curriculum established by the school institutions was assigned, using only occasional extracurricular activities, without being organized, directed and evaluated by a specialist in the field or by the students parents. To assess the effectiveness of the proposed experimental methodology, at the end of the pedagogical experiment the results of the morpho-functional and physical training of students were recorded and statistically processed.

In order to verify the working hypothesis, a strategy to act with the proposed methodological model on the development process of coordination abilities was established. The volume of games applied in physical education lessons was about 45-50% (20 - 23 min.), including: in the preparatory section- 70-75% (7-9 min.); in the base section - 30-35% (10 - 12 Min.) in the ending section - 40-45% (2-3 min.).

The means used were selected according to the main objectives of the lessons, but also in relation to the training level of children. These games were applied during an academic year, on pupils in the 5th and 6th grades, under the traditional methodology of conducting games of movement, provided by the theory and methodology of physical education.

The experiment involved a total of 100 students in grades 5th and 6th (age 11-12 years), 55 girls and 45 boys. In the experimental classes, the activity took place after a new working methodology, using a lot the methodological model. The control classes were held as regular classes under the traditional methodology.

The experiment began and ended with testing physical and functional indices, movement training indices, level of development of coordination abilities indices, the results being processed and presented separately for classes, separate for boys and girls.

Applying the proposed methodology during physical education classes, based on recommendations made by a specialist teacher, an interesting trend occurred in the development of physical training parameters of the students included in the experiment. Both in the groups of boys and of girls, nine events were tested, of which one specific to gender.

These events were:

- 50m speed running (test1)
- resistance running 800m girls and 1000m boys (test2)
- long jump on the spot (test3)
- long jump with momentum (test4)
- throwing a rounders ball (test5)

- trunk lifts and trunk lifts lying face down (test 6 and 7).

Evaluation Methodology

In order to achieve consistent and effective assessment of students of the mentioned age in the two groups (control and experimental), we will observe during the two tests (initial and final) the following requirements:

- Sequencing of events will be determined by the teacher;
- It is recommended to support the movement tests at the end of thematic cycles where work has been done on developing that ability;
- The results from assessment tests will be recorded in the record files specific to each category of measurements; for events with multiple measurements the best result will be recorded;
- Students tested will wear appropriate sportswear and footwear, ensuring optimum support;
- Events will be held such as not to affect the integrity of the students bodies;
- The teacher who coordinates the testing will take all necessary measures so that the events take place under optimal conditions for all students involved, meaning an effective scheduling on groups of children, in order to eliminate unnecessary waiting times which would bring over fatigue, lack of concentration, nervousness;
- In order to eliminate measurement errors caused by instruments used, it is recommended that teachers use the same toolset throughout the test and for all groups tested, replacing it only for objective reasons and only in extreme cases (eg. broken timer).

The results obtained from initial and final testing by groups of girls or boys were graphically represented compared with the national scale values for this age group, separate for each event, so that the progress of the experimental group can be better observed.

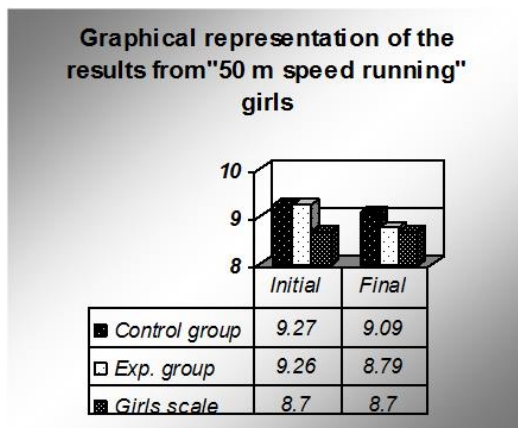


Figure 1. Representation of the results from test1- girls

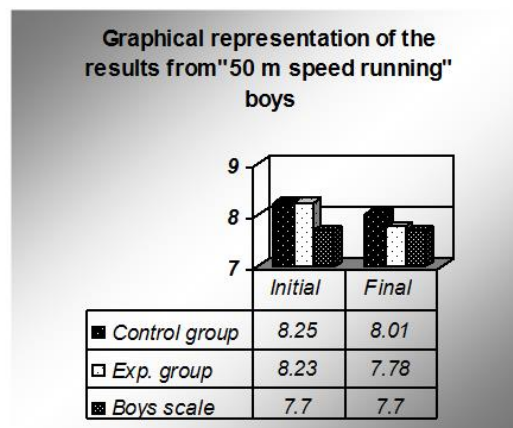


Figure 2. Representation of the results from test1- boys

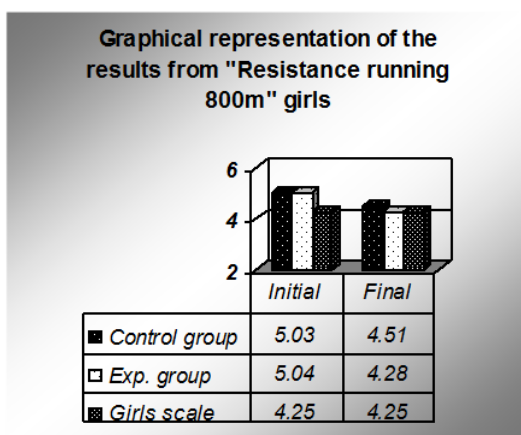


Figure 3. Representation of the results from test2- girls

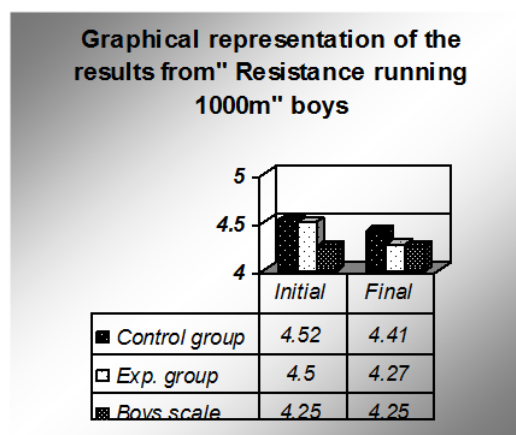


Figure 4. Representation of the results from test2- boys

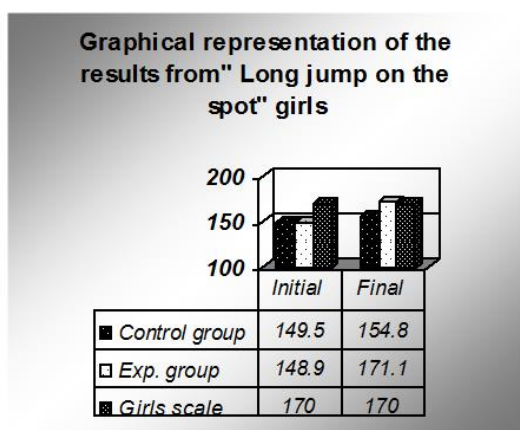


Figure 5. Representation of the results from test3- girls

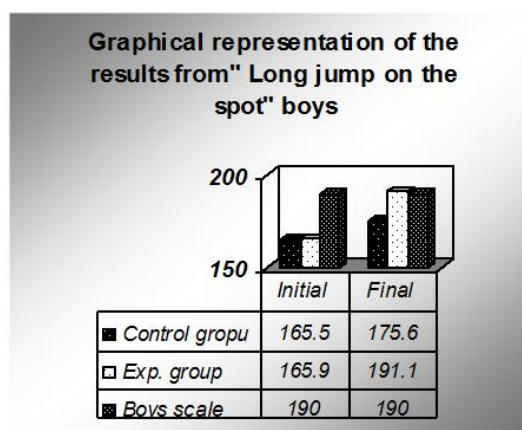


Figure 6. Representation of the results from test3- boys

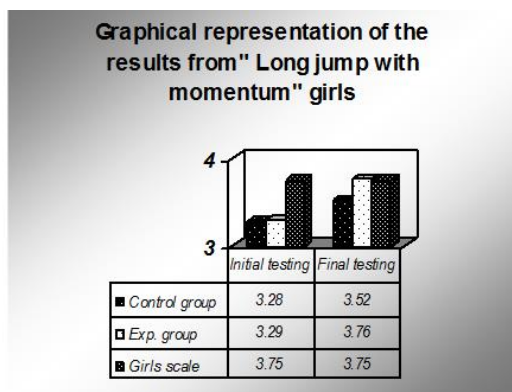


Figure 7. Representation of the results from test4- girls

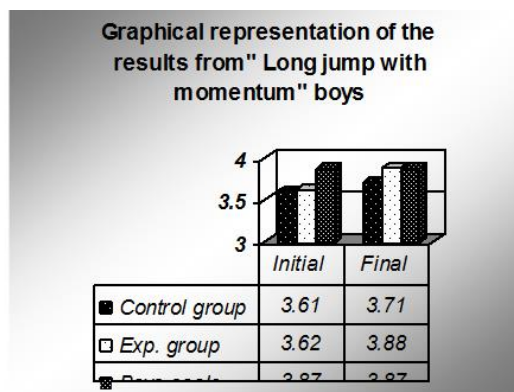


Figure 8. Representation of the results from test4- boys

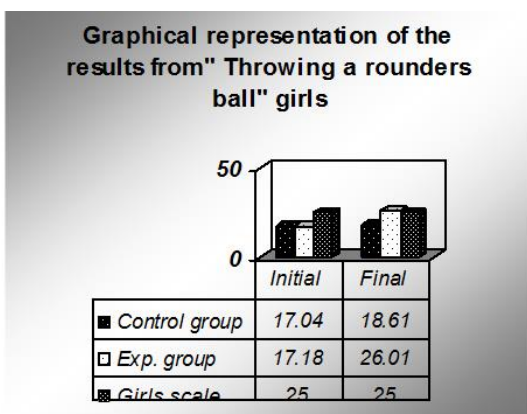


Figure 9. Representation of the results from test5- girls

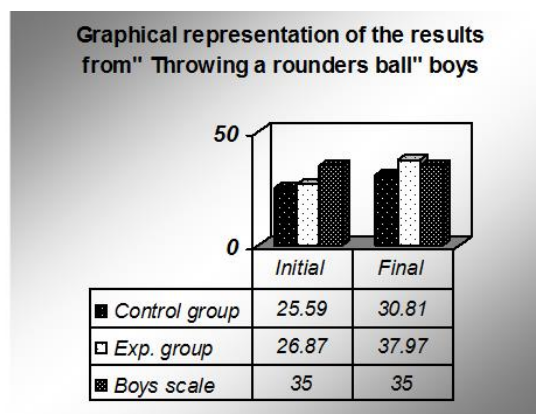


Figure 10. Representation of the results from test 5- boys

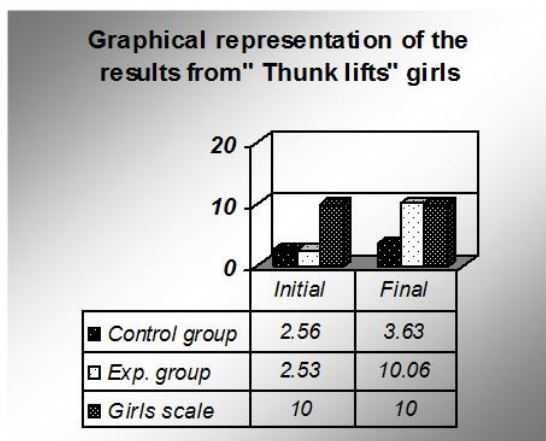


Figure 11. Representation of the results from test 6- girls

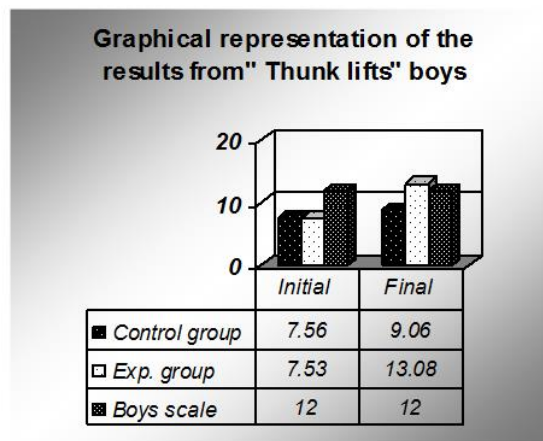


Figure 12. Representation of the results from test 6- boys

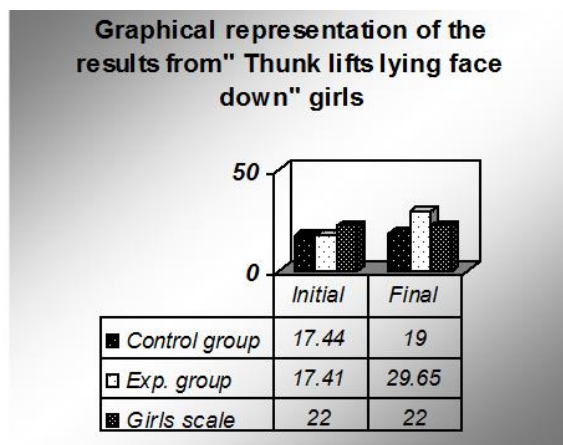


Figure 13. Representation of the results from test 7- girls

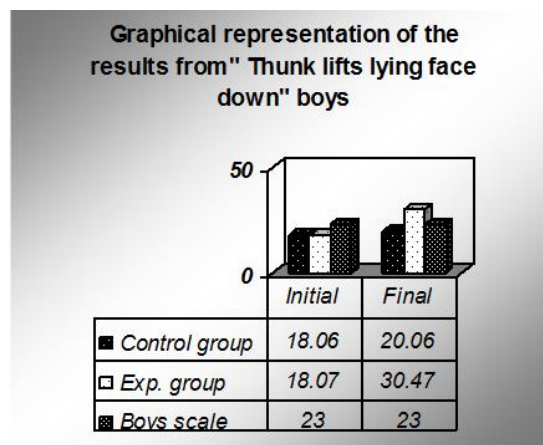


Figure 14. Representation of the results from test 7- boys

Interpreting the results

The final testing of the students gave a good overview that is based on objective data, making it possible to compare them with data from the initial testing in order to better observe the dynamics of movement indices during the school year. The analysis of the data recorded at the initial tests confirmed the existence of a very close level of training between the two groups of girls that were included in the experiment teaching.

This provides information on the homogeneity of the groups included in the teaching experiment. Compared with the above, at the end of the experiment subjects in the control group had better results in all the events that were tested. But these increases were only significant in six of these events. Also, from the data taken from the group of boys it can be seen that the same situation is found in this case, too, both in the initial tests and the final ones. The control group showed an insignificant increase in one of the events tested, namely "running resistance" ($p > 0.05$). The highest increases were recorded in force events (hung tractions, push-ups, trunk lifting from lying position) and events of force-velocity (throwing a rounders ball, long jump on the spot) ($p < 0.001$).

It can therefore be appreciated that secondary school students were able to improve their level of physical training by attending classes in the compulsory school program and by addressing the elements contained in the curriculum. Meanwhile, those who were the subjects of the experiment and followed the methodology at the indication of the teacher had a more obvious progress outpacing the

students from the control group in all areas of training.

Given the above, a comparison of results to other results was performed, as a level of the progress in itself, as well as by comparing them to the performance requirements of the national evaluation system for secondary school level. It can be said that the level of success in "Physical Education" is weak to medium for the control group, who attended the classes in the school schedule, with just the topics planned by specialist teachers.

In the experimental group, who practically performed the same as the control group during the class as it was scheduled, following mandatory topics for sixth grade as they were developed in the planning of physical education classes, there was a much greater success.

The outcomes at the end of the study in experimental groups substantially exceed not only the requirements of the curriculum, but also the scales of the National System for Evaluation in most events tested.

We conclude that the experimental group showed superior results compared to the control group at all events as far as the physical training is concerned. Thus, the recorded results justify the effectiveness of using the methodological model based on the use of means specific to the football game, conducted systematically with the secondary school students, aged 11 to 12 years. They have positively influenced the increase of physical training level and of success in physical education, which fully confirms the assumption made at the beginning of the research.

Conclusions

The experiment demonstrates that the use of means specific to the football game as a form of training students in the secondary school can be achieved as a continuation of training that they receive during their class, by programs with simple and accessible structures, in other words the teacher is the one who can adopt and recommend this issue of training.

Organizing the practice of this methodological model by secondary school students will take into account the following methodological recommendations:

- Explaining to students some notions of biomechanics, and providing them with information on the influence of practising physical exercise from a physiological point of view, their interest in independent activity, conscious and active participation in their own learning process will be stimulated.
- In order to obtain higher indices of general physical training with the possibility of using them at higher levels, it is necessary for students' organism to undergo efforts adapted in terms of volume and intensity, with appropriate means and which are performed with a certain continuity.
- Selecting resources to be used by students in their work will be done so that they are easy actions, known to students from previous activities and which does not require sophisticated or expensive material basis.
- In terms of dosing effort, it will be done gradually and it will be recommended by the teacher to each student individually, depending on individual characteristics (age, sex), as well as on the level of training that he is at. Dosage will follow the progressive increase in the number of repetitions

per set or the increase in the intensity with which they will be performed.

- The level of effort must be larger in terms of quantity compared to quality, meaning that it is preferable that the students carry out a large volume of effort of low-intensity rather than to make great effort of short duration, but of high intensity. This is, actually, a specific feature of puberty in addressing physical activity.
- To provide physical education activities an attractive character that stimulates students to carry them on, in assessing the students it is recommended for the teacher to organize during centralized activity some track games, games of movement and relay that make students able to express the degree of development of physical training level reached. These actions represent a good opportunity for the teacher to see if the programs used are carried on by students and what are their opportunities to capitalize the physical training level in as varied conditions as possible.

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